# PATENT ABSTRACTS OF JAPAN
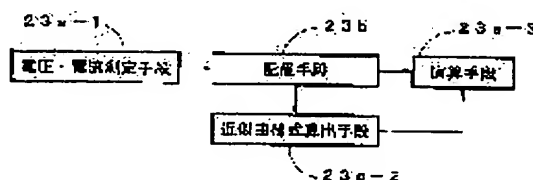
(54) METHOD AND APPARATUS FOR MEASURING PURE RESISTANCE OF ON-VEHICLE BATTERY

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a method and an apparatus for measuring the pure resistance of an on-vehicle battery even during use of the vehicle.

SOLUTION: A voltage-current measuring means 23a-1 periodically measure the terminal voltage of a battery, and a discharge current flowing from the battery to a load being driven with a rush current monotonously increasing over a steady-state value at the driving start and then monotonously decreasing from the maximum value to the steady-state value. Based on the measured discharge current and terminal voltage, a calculating means 23a-2 obtains an approximate curve expression of voltage-current characteristics for the discharge current in the monotonously decreasing period from the maximum value to the steady-state value. An arithmetic means 23a-3 obtains the gradient of a tangent at the maximum value of the discharge current on the approximate curve expression obtained by the calculating means, thereby taking the obtained gradient of the tangent as a pure resistance of the battery.

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